

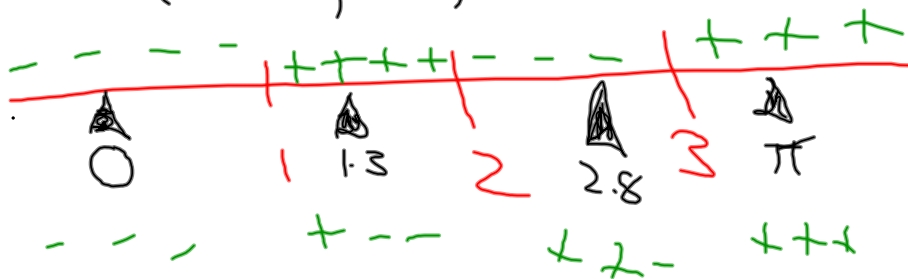
	Slope intercept form	Standard form	Point slope form
What is it?	$y = mx + b$	$Ax + By = C$ $Ax + By + C = 0$	$y - y_0 = m(x - x_0)$ <i>variables</i>
How many different forms of this equation does a single line have?	1 (unique)	infinite (one for each multiplier)	infinite (one for every point on line)
What are the distinguishing characteristics?	$y =$	x & y on the same side	goes through (x_0, y_0)
What is this form useful for?	<u>graphing</u> eqn \rightarrow graph graph \rightarrow eqn	<u>$2x - 3y = 7$</u> finding intercepts (<u>& graph</u>) \longrightarrow	<u>to graph</u> have a point & have a slope <u>Write an eqn.</u> given m, pt

$$\textcircled{1} \quad f(x) = (x-1)(x-2)(x-3) > 0$$

$$(x-1)(x-2)(x-3) = 0$$

$$x-1=0$$

$$x = 1, 2, 3$$



2.5) $[-2, 1]$

$$-2 \leq x \leq 1$$

$$[\quad]$$

$$\leq \quad \geq$$

$$(\quad)$$

$$< \quad >$$

$$(1, 7)$$

$$1 < x < 7$$

$$\begin{array}{r} 2.5 \\ \hline 31 \\ 13 \\ 69 \\ 57 \\ 7 \\ 71 \end{array}$$

$$\underline{13)} -3 < x < 14$$

$$\text{int: } (-3, 14)$$

$$\textcircled{31)} \quad \frac{x+1}{2} - 3x \leq \frac{x+5}{3}$$

$$\frac{3(x+1)}{2 \cdot 3 = 6} - \frac{18x}{6} \leq \frac{2(x+5)}{6}$$

$$\underline{3x+3-18x} \leq \underline{2x+10}$$

$$\textcircled{-15x+3 \leq 2x+10}$$

$$\frac{3x+1}{2x-4} > 0$$

71

$$\frac{2x^2+6x-8}{2x^2+5x-3} < 1$$

$$\frac{2x^2+6x-8}{2x^2+5x-3} - 1 < 0$$

Precalculus 2011-01-31